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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/766,815	01/22/2001	Albert Wurz	ASI-PT009.3	2163	
3624	7590 06/18/2002				
VOLPE AND KOEŃIG, P.C. SUITE 400, ONE PENN CENTER 1617 JOHN F. KENNEDY BOULEVARD			EXAMINER		
			PHAM, HOA Q		
PHILADELPI	HIA, PA 19103		ART UNIT	PAPER NUMBER	
			2877		
			DATE MAILED: 06/18/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

٧,		Application No.	App	olicant(s)				
Office Action Summary		09/766,815	_ wu	RZ ET AL.				
		Examiner	Art	Unit				
		Hoa Q. Pham	287	•				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status								
1)⊠	Responsive to communication(s) filed on 291	<u> March 2002</u> .						
2a)⊠	This action is <b>FINAL</b> . 2b) Th	is action is non-fi	nal.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
·	ion of Claims	_						
,—	Claim(s) 2-23 is/are pending in the application		ation					
	4a) Of the above claim(s) is/are withdrawn from consideration.							
· ·	Claim(s) <u>2-23</u> is/are rejected.							
	☐ Claim(s) is/are objected to. ☐ Claim(s) are subject to restriction and/or election requirement.							
Applicati	ion Papers	·	nent.					
•	The specification is objected to by the Examine							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.								
11)				by the Examiner.				
If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120  13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) All b) Some * c) None of:								
-71	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
<ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>								
Attachment(s)								
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>9</u>	5) 🗌	Interview Summary (PTO Notice of Informal Paten Other:					

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 2-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakinoki et al (5,004,929) in view of Schmutz (5,555,090).

Regarding claims 2-3, 16-17, 18-19, and 21-23; Kakinoki does not explicitly teach that the object to be inspected is moved by a conveyor and the optical inspection system is located on a chassis. However, such a feature is known in the art, for example, as taught by Schmutz. Schmutz, from the same field of endeavor, discloses a system for measuring the dimensions of an object in which the object is moved on a conveyor and the inspection system is located on a chassis (see figure 1). Those of ordinary skill in the art at the time the invention was made to use the basic device of Kakinoki et al for detecting the packages which is transferred on a conveyor as taught by Schmutz because the device would function in the same manner.

Regarding claims 4, 8-9 and 20, Kakinoki et al does not explicitly teach that the sensor is a line scan camera or CCD; however, such a feature is known in the art as taught by Schmutz. Schmutz teaches that the linear camera (160) is used or detecting the height of an object (column 4 lines 61-62). Those of ordinary skill in the art at the time the invention was made to replace the position sensitive detector of Kakinoki et al

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by a camera as taught by Schmutz because they both can be used for detecting the height of an object. A substitution for each other is generally recognized as being within the level of ordinary skill in the art.

Regarding claims 5-7, Kakinoki et al does not teach that the width or the length of the object is measured. However, it would have been obvious to one having ordinary skill in the art to use the basic device of Kakinoki et al for measuring the length or width of the object if additional measurement is desired.

Regarding claims 10-13, see column 6 lines 3-13 of Kakinoki et al for Position Sensitive Detector (PSD).

Regarding claims 14-15, see column 2 lines 57-58 of Kakinoki et al for parabolic reflector.

3. Claims 2-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordbryhn (4,996,440) in view of Schmutz.

Regarding claims 2-3, 16-17, 18-19, and 21-23; Nordbryhn does not explicitly teach that the dimension of object to be measured is height. However, such a feature is known in the art, for example, as taught by Schmutz. Schmutz, from the same field of endeavor, discloses a system for measuring the height of an object (see abstract). Those of ordinary skill in the art at the time the invention was made to use the basic device of Nordbryhn for detecting the height of the object as taught by Schmutz because the device would function in the same manner.

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Regarding claims 4, 8-13 and 20, Nordbryhn does not explicitly teach that the sensor is a line scan camera or CCD; however, such a feature is known in the art as taught by Schmutz. Schmutz teaches that the linear camera (160) is used or detecting the height of an object (column 4 lines 61-62). Those of ordinary skill in the art at the time the invention was made to replace the detector (9) of Nordbryhn by a camera as taught by Schmutz because they both can be used for detecting the height of an object. A substitution for each other is generally recognized as being within the level of ordinary skill in the art.

Regarding claims 5-7, both Nordbryhn and Schmutz do not teach that the width or the length of the object is measured. However, it would have been obvious to one having ordinary skill in the art to use the basic device of Nordbryhn or Schmutz for measuring the length or width of the object if additional measurement is desired.

Regarding claims 14-15, see figure 2 of Nordbryhn for parabolic reflector (7).

### Information Disclosure Statement

4. The information disclosure statement filed 7/12/01 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

With respect to the present invention, a copy of the foreign patents are not found in this application or any earlier applications (08/918,196 or 08/459,342).

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See US Patent Nos. 6,177,999 or 5,661,561, only three foreign references are cited: 2189594 (United Kingdom), WO9427166 (WIPO) and WO9612931).

# Response to Arguments

5. Applicant's arguments filed 3/29/02 have been fully considered but they are not persuasive.

Applicant's remarks, pages 7-11, argues that the references (Kakinoki et al, Schmutz and Nordbryhn) do not teach or suggest "wherein the light beam, when not obstructed by the object, impacts the conveyor at **an angle** relative to a perpendicular extending from the conveyor" as now claimed in claims 2, 16, 18, 21 and seen from figure 5 of the present invention. It is agree that there is a difference between the present invention (i.e., angle (O) from figure 5 of the present specification) and the references. However, the claimed language is read on the teachings of the references. For example, "the **angle** relative to a perpendicular extending from the conveyor" is at **zero degree** as seen from figure 4 of Kakinoki et al or figure 2 of Schmulz or figure 1 of Nordbryhn. Thus, the claimed language still read on the teachings of the references and the argument is not deemed to be persuasive.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hoa Q. Pham

**Primary Examiner** 

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Pham/hp

June 7, 2002